

**Abstract****Method and device for cultivating eukaryotic microorganisms or blue algae, and biosensor with cultivated eukaryotic microorganisms or blue algae**

The invention relates to a method and device for cultivating eukaryotic microorganisms, whereby a perforated support (14) having a first major surface (19) and a second major surface (22) which is substantially impermeable to eukaryotic microorganisms (20), is prepared and the microorganisms (20) are applied on the first major surface (19). A layer, containing an aqueous solution (18), passes over the second major surface (22). Said aqueous solution (18) moves from the second major surface (22) to the first major surface (19) substantially by means of capillary forces. As a result, the first major surface (19) is supplied the aqueous solution (18) and the applied microorganisms (20) grow on said first major surface (19).

(Fig. 1)